

## THE URGENT NEED FOR A MORE ADEQUATE TREATMENT OF SYPHILIS.\*

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At the 1914 meeting of the A. M. A., during the symposium on syphilis several of the participants, men prominent in the urological branch of the medical profession made the rather startling assertion that 99 per cent. of the practitioners of medicine in the United States did not know how to properly treat syphilis. Of course such a broad statement is not justified by the facts, for the knowledge of the therapy of this disease is not by any means monopolized by one per cent. of the profession. Furthermore, the statement was inaccurate, perhaps, in that it implied that the other one per cent did know how. If the gentlemen had said that 100 per cent. of the medical profession in the civilized world, including themselves, did not know how to treat syphilis, their assertion would have been no less startling; but I am convinced that it would have been nearer the whole truth.

We know a great deal about the diagnosis and treatment of this disease which lays its blight annually upon thousands of men, women and children. We know much more to-day than we did yesterday, and will know more to-morrow than we do to-day, but even with the remarkable advances that have been made in the last decade in methods of diagnosis and the discovery of new remedies which, if they do not cure, certainly perform miracles in causing the disappearance of symptoms, can any man say that he positively knows the proper, most efficient and adequate method of applying these remedies to the end that syphilis be permanently cured in the shortest possible time?

By perusing the current voluminous literature on this subject, we learn that there are several schools of treatment, each having among its adherents men of unquestionable ability as syphilologists, and this fact is a frank admission on our part that we are still feeling our way—not only as to the best remedy to apply, but particularly as to the best method and dosage to be used in applying them, and there is still a wide variance of opinion as to the period which must elapse before a permanent cure is effected. For example, many eminent physicians, particularly in Germany, use the arsenic preparations to the exclusion of all other drugs. There are a few who, having tried the salvarsan treatment have discarded it and pin their faith entirely to the tried and true mercurials. For the nonce the most popular treatment is a combination of mercury and arsenic, but so numerous and varied are the methods of combining them, both as to proportions and dosage, and so numerous and varied are the results published that surely it would be presumption for any man to say that his was the last word that could be said on this subject. It is with no pretense of saying the last word, but rather with an effort to bring a semblance of order

out of more or less chaos that this paper is presented.

We know much about syphilis; we know the causative agent; we know its varied and complicated pathology; we know how to recognize most of its clinical symptoms and to differentiate them; we know how to recognize and interpret the symptom known as the Wassermann reaction and lately have learned that too much dependence cannot be placed upon that symptom alone. And we know that with the remedies at our disposal, imperfect though the future may demonstrate them to be, syphilis is a curable disease. With all this knowledge at hand that so large a percentage ofluetics are not cured is probably as great a stigma as rests upon the medical profession. If syphilis is curable, why are insane asylums filled as they are to-day with the victims of cerebral syphilis and why are thousands dying annually from the late destructive lesions of the disease? It is true that it is extremely difficult to convince the ordinary luetic that it is necessary to persevere in giving him poisonous drugs after all objective manifestations of the disease are absent. To him this savors too much of commercializing his affliction. This is our best alibi in defending ourselves against the charge of responsibility for the great prevalence of uncured syphilis. The widespread publicity given to salvarsan by the lay press whereby the public was led to believe that at last a remedy had been discovered which at one fell swoop would thoroughly eradicate syphilis from the infected organism and the manner in which unscrupulous men masquerading under the name of "physicians" fostered and are still fostering that delusion can have but one result. The number of men and women, who have taken one or more salvarsan injections and gone forth secure in the belief that they are permanently cured is legion. Many of them will not believe when told that more recent investigations have proven their treatment to have been inadequate. It cannot be doubted then that because of such pernicious exploitation of this splendid addition to our armamentarium the next generation will witness such a crop of cerebral, spinal and visceralluetics as was never known before. But even with these alibis the honest, reputable, conscientious physician is not blameless. It is a far cry from the charlatan who assures his victim that if he can mortgage the little vine-clad cottage for \$100, or \$500, so that he can have one or two salvarsan treatments that he will be permanently cured, to the physician who prescribes proto iodid pills, alternating with small doses of K. I., and advises the patient that he had better keep it up for a year or two, to make sure of a complete cure, but the net result is the same. Neither method is efficient or adequate, as has been proven conclusively by the experience of any physician who has watched the cases through to the end.

Syphilis when contracted by the ordinary man or woman, or when inherited from syphilitic parents, is more than a disease; it is a tragedy. Whether the infection comes innocently or following an infraction of the moral law, the sense of shame and humiliation, of the loathsomeness of his condition, of the utter uselessness of any effort to

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be as other men, makes the suffering mostly mental, as physical pain is, except in spinal involvement, generally entirely absent. It is a serious affair, both to themselves and to those with whom they associate, but it has this one saving grace: Acquired syphilis unless neglected is neither fatal nor does it seriously interfere with its victim's usual activities. In an economic sense it is bad enough, but it is much less serious than are many less dreaded afflictions to which humanity is heir. One of its greatest horrors to the intelligent lay mind is the feeling that he almost never knows when he is cured. It is the hope of all and the belief of many that out of all the exhaustive studies that are being made, before long some means will be devised whereby a test can be applied that will demonstrate once and for all that a permanent cure has been effected, but for the present there are but two ways by which we may be sure of the success or failure of our treatment. One is to watchfully wait out the years in the hope that our medication has been permanently successful; the other is to have the patient become reinfected. Neither method is satisfactory from the standpoint of patient or medical attendant, but it is all we have on which to base a statement of complete cure.

What can we as physicians do to force these patients, who are so numerous and who constitute so great a menace to the public health and to the unborn generations, to continue their treatment? We might with reason and consistency advocate a statute, providing that they must be registered at some place inaccessible to the public and that they be in the position of paroled prisoners, obliged to report to the health authorities once a year or oftener and show that they have been properly treated or at least under competent observation. There are many laws in existence now much more paternalistic and which to a much greater extent interfere with personal liberty than would this, but the attitude of the lay mind on the subject of government regulation of venereal disease is such that this generation at least cannot hope for such legislation. It is up to us then to bring to bear upon these patients every influence at our command to protect posterity and to insure the victims themselves against the terrible end results of their own indifference and neglect. In our efforts in this direction lie the urgent need of a more adequate treatment of syphilis.

The first thing necessary is to thoroughly convince the patient of the seriousness of his condition and not wait for him to be convinced by the onset of visceral lesions. A confidential talk setting forth the gravity of the disease and the probable course of treatment necessary for permanent relief will do much, but I find it more convincing to give to each patient, both in private and dispensary practice, a printed sheet which I word as follows:

"You are afflicted with syphilis. The disease now shows only externally, but it is in your blood and will be in your blood for some time after all external visible symptoms are gone. You cannot

be cured in one week, one month or one year, nor is there any medicine known, one or two doses of which will cure you. The disease can be cured completely, but only if you place yourself under the care of a competent, conscientious physician and follow his directions to the smallest letter. Make up your mind to be under a physician's observation for not less than five years. This does not mean that you will be under treatment for five years, perhaps not one-half that time, perhaps none after the first two years, but keep under the physician's observation and let him decide whether or not you need treatment. Do not allow yourself to be treated or advised by advertising doctors or quacks. They are rarely competent and are never honest. The disease is dangerous to your health only if you neglect it. If properly cared for, neither the disease nor the treatment instituted for its relief will cause you any serious inconvenience or detention from work. If neglected, however, it will in later years attack your vital organs, heart, arteries, kidneys, spinal cord and brain, rendering you a helpless invalid or a victim of insanity. To insure you against such a fate you will have to be treated at times when there are no visible evidences of the disease and when it seems to you unnecessary and foolish. You must not marry until four years have elapsed after the first appearance of the disease. If you do, you will endanger your wife and your offspring. After that, if you have been properly treated, you can marry and beget children with safety to both. If you have occasion to transfer your case from the care of one physician to another, be sure to have the doctor who has treated you give you a complete history of your case since he took charge of it; the symptoms including result of blood test, treatment and results of treatment on the symptoms. Present this record to your new physician. Your infection can be transmitted to others through other means than sexual intercourse. Therefore, for the protection of the public, refrain from kissing anybody and do not use public drinking vessels, cigar clippers, towels, etc., from which others might become infected. By paying due and strict attention to these instructions you can not only protect others with whom you are unavoidably associated, but you can conceal the fact that you have this disease and can assure yourself not only of freedom from the evil effects of the early symptoms, but of future health and usefulness."

On the reverse side of this page of instructions can be printed blanks to be filled in briefly by the attending physician, showing the course of the disease with all its manifestations; the treatment instituted, with dates and dosage. This data to be taken from the records which all painstaking physicians keep. The value of such a record to the doctor who falls heir to the case in its later years cannot be overestimated.

I look upon a luetic patient as in some sense a ward of mine, for whom, to a certain extent, I am responsible. If he does not appear in due time for treatment or examination, I notify him of that fact by mail and he usually comes, but always with the story that inasmuch as he had been entirely free

from symptoms, he considered further treatment unnecessary. Right here and now I wish to enter my protest against the symptomatic treatment of syphilis. The physician who treats lues only when there are clinical or serological evidences present is as much at fault as he who administers copious doses of morphia and thereby masks the symptoms of pneumonia or appendicitis. In either case he is deceiving both himself and his patient into a false sense of security.

Having if possible gotten the patient under control and presuming that he will entrust his case to you for at least four or five years, what constitutes an adequate therapy of syphilis? It is unfortunate that the treatment is not better standardized, that there is still some disagreement among our best syphilographers, but yet out of all the heterogeneous literature of 1915 there is, if we eliminate the extravagant claims of a few ultra-enthusiasts, a fairly unanimous opinion upon this subject. Undoubtedly there are well authenticated instances of cures following a few months of intensive treatment, but in reading of these cases and knowing the possibility of error in diagnosis and the still greater possibility that sufficient time has not elapsed since the so-called cure to either affirm or to deny the statement, I think it well to take all these reports with "a grain of salt." Knowing that the spirochetæ even in the earliest stages of the infection have permeated every part of the body reached by the blood stream and that to eradicate them requires not only intensive but persistent treatment, and that neglecting to keep the system saturated with some spirocheticide for a prolonged period will almost inevitably result in relapses, our course is fairly plain. I believe that the dangers of over-dosage and over-saturation with mercury have been greatly overestimated. Our best known authors upon the subject seem to be afraid that somebody will be salivated. The maximum dosage of the different mercurial salts is usually given at what is actually the minimum dosage and far smaller than actual practice teaches us is correct. For example, we are advised to give succinimide of mercury intramuscularly in doses of from one-fifth to four-fifths grain, whereas one and one-fourth grains has been given intravenously with perfect safety and gratifying results. The salicylate is mentioned as the insoluble salt of choice with a maximum dosage of one and one-half grains. I have a patient weighing 145 pounds with late syphilis who has had three grains of salicylate intramuscularly every five days for twelve weeks with no untoward results either at the site of injection or elsewhere. A burly New York policeman was given weekly doses of five grains for ten weeks, and because this seemed inefficient, eight grains weekly were injected for five more weeks with no serious signs of mercurialism. Many of the symptoms usually ascribed to too much mercury are in reality due to too much syphilis and call for an increase rather than diminution in the dosage. The necessity for periods of cessation of treatment to allow the patient as we say to recuperate from the effects of medication is similarly

exaggerated. Too often these periods of intermission, designed to be of a few weeks' duration, are extended by the patient's indifference into months and years to his ultimate detriment. The better plan is to keep them coming at least once a week for a period of two years. Should it become necessary to lessen the dosage or even to cease entirely for a brief period, a placebo may be given, for only by seeing these patients at frequent intervals can the course of the disease be intelligently noted and the treatment intelligently administered.

Herein lies one great superiority of the intramuscular injection over all other methods of administering mercury. It compels regular visits to the doctor's office and enables him to grade his dosage as occasion demands. The inunction method is undoubtedly efficient and is the method of choice where the patient is unable to come to the office. It is the only way in which the drug can be self-administered with satisfactory results, but so few patients will do it properly that I have always found it unsatisfactory and difficult to control. Giving mercury by the mouth with a view of curing syphilis, whether in the form of protoiodide, biniodid, bichloride or what not, should, I think, be made a penal offense. In my experience the administration of mercury is best achieved by giving it in the form of deep intramuscular injections of the salicylate every five to ten days, in doses ranging from one grain to three or even more, as the exigencies of the case and the patient's tolerance demand. By constantly watching the mouth and urine it is a simple matter to avoid the slight danger of over-treatment. Mercury is rapidly eliminated from the system and there is no reason why a generous supply of it should not be coursing through the tissues of an individual afflicted with syphilis for practically the whole of the two-year period. The reason for choosing the salicylate in preference to calomel or gray oil is only that it is less painful. The thing that we are attempting to administer is metallic mercury, of which the salicylate has approximately 58 per cent., calomel 85 per cent., and gray oil 100 per cent. Therefore, as far as efficiency is concerned, there can be but little, if any, advantage to be gained by one over the other. The salicylate simply must be given in larger doses.

The advantage of the insoluble salts over the soluble ones is that in the former a depot is established which requires five to ten days for absorption, during which time the system is more or less continually saturated with the drug. The soluble salts are absorbed in toto immediately and are eliminated in a correspondingly short period. The continual presence of mercury in the blood stream in such quantity as to successfully keep up the fight against the invading organism is the end to be sought. Potassium iodide in the late stages is of use in promoting absorption of luetic deposits and for the relief of luetic headaches, but it must be borne in mind that it is in no degree a spirocheticide or an anti-syphilitic remedy.

There is a very wide divergence of opinion as to the amount of salvarsan it is best to give in connection with the prolonged course of mercury.

Probably we have never had a drug that has been so greatly abused and so unintelligently given, chiefly, I fear, for commercial reasons. My opinion is that its greatest usefulness is in the first six months after the infection, when in combination with mercury frequent intravenous injections of moderate amounts are given in an effort to overwhelm the invading organism before it can reach parts of the body inaccessible to any treatment. The drug is practically unobtainable now and yet I doubt if our therapy of syphilis is suffering greatly thereby. Now that we are placed in a position where mercury alone must be used, we have the opportunity to prove this: What salvarsan will do, mercury will do. What mercury will not do, salvarsan will not do. What salvarsan will not do, mercury will do.

Having persistently and intensively treated the disease for two years in a manner similar to that outlined above, the physician then may safely adopt a policy of watchful waiting for two or three years more. It is with extreme gratification that we can say that at least a majority of the cases will never show another symptom either clinical or serological. If they do, and some will, treatment more intensive, if possible, than that given before must be begun and prosecuted vigorously for at least another year. It is doubtful, however, if it is possible to ever get more than a symptomatic cure in a case that shows clinical symptoms after two years of adequate saturation with mercury and salvarsan.

In presenting to this Society this paper I assure you that I am fully aware of its shortcomings. I am aware that there comes to the syphilologist at times a case in which it seems that the luetic poison invades the whole body with such overwhelming virulence almost from its inception that our most active and persistent efforts will fail to stem its ravages to any appreciable extent. Fortunately these virulent cases constitute but a very small fractional per cent. of the total. It is also true that in spite of our most persistent efforts there will always be a liberal percentage of syphilitics who will refuse to be cured of their disease. We can reduce this number materially, however: First—By using greater frankness in telling an infected individual what the probable course of his disease will be, withholding nothing for fear of discouraging him. Second—By standardizing as much as possible our methods of treatment. Third—By abandoning the inadequate methods of treatment still more or less in vogue. Fourth—By treating everyone as a patient with a curable disease, which only needs persistence and determination on the part of patient and physician to yield happy and permanent results.

That there will be those who will develop late visceral lesions even after the above rigorous régime has been carried out I cannot safely deny. That a much greater percentage of successful results can be realized and that the stigma of incompetency quoted in the beginning of this paper can be removed by the adoption of a course similar to the above and the abandonment of the timidity and inefficiency which characterizes much of our present-day treatment, I thoroughly believe.

## SOMETHING TO REMEMBER! — THE ADVERTISERS IN YOUR STATE JOURNAL OF MEDICINE

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### SOCIETY REPORTS

#### ALAMEDA COUNTY.

The regular monthly meeting of the Alameda County Medical Association was held at the Hotel Oakland, Tuesday evening, January 18, 1916. The minutes of the previous meeting were read and approved.

The following program was presented:

1. Case report, Dr. Daniel Crosby.
2. Syphilitic arthritis, Dr. Leonard Ely, San Francisco.
3. Fat embolism with report of a case, Dr. Robert T. Legge, U. of C.; pathological report by Dr. Granville Rusk, U. of C.

Dr. John Engs appeared before the Society and asked for its endorsement of the project to establish a branch of the American Red Cross in Oakland. On motion, this endorsement was given.

The Secretary read a set of resolutions passed by the Southern Medical Society of Texas asking for ample medical service in the increase to the U. S. Army proposed by the Administration. These resolutions were sent by the President of the State Medical Society, Dr. H. M. Sherman, with the request that we adopt similar ones. On motion, this was done and copies ordered sent to the Secretary of War and the California Senators and Representatives in Congress.

There being no further business the meeting adjourned.

ELMER E. BRINCKERHOFF, Secretary.

The regular monthly meeting of the Alameda County Medical Association was held at the Hotel Oakland, Tuesday evening, February 15, 1916.

The minutes of the previous meeting were read and approved.

The following program was then presented:

1. Treatment of Syphilis of the Nervous System by Intra-Spinal Injections. Dr. Jau Don Ball.